

WHAT IS CLAIMED IS:

1. A stator comprising:

a stator frame;

a plurality of key bars connected to said stator frame, each of said key bars having a dovetail; and

a stator core including:

a first stator core section including at least one lamination having a first dovetail slot formed therein for engaging a first one of said dovetails; and

a second stator core section including at least one lamination having a second dovetail slot formed therein for engaging a second one of said dovetails, said second dovetail slot having a cross-sectional area which is smaller than a cross-sectional area of said first dovetail slot.

2. The stator of claim 1 wherein said first one of dovetails projects into said first dovetail slot such that no portion of said first one of dovetails directly contacts said lamination having said first dovetail slot formed therein.

3. The stator of claim 2 wherein said second one of dovetails projects into said second dovetail slot such that said second one of dovetails directly contacts a portion of said lamination having said second dovetail slot formed therein.

4. The stator of claim 1 wherein said first stator core section is a pre-packaged stator core section.

5. The stator of claim 4 wherein said second stator core section is a manually stacked stator core section.

6. The stator of claim 5 wherein more of said stator core is formed by said first stator core section than said second stator core section.

7. The stator of claim 1 wherein said first stator core section is held to said stator frame by a force caused by core stacking pressure of said stator core.

8. A stator comprising:

a stator frame;

a plurality of key bars connected to said stator frame, each of said key bars having a dovetail; and

a stator core including:

a pre-packaged stator core section including at least one lamination having a first dovetail slot formed therein for engaging a first one of said dovetails; and

a manually stacked stator core section including at least one manually stacked lamination having a second dovetail slot formed therein for engaging a second one of said dovetails.

9. The stator of claim 8 wherein said second dovetail slot has a cross-sectional area which is smaller than a cross-sectional area of said first dovetail slot.

10. The stator of claim 9 wherein said first one of dovetails projects into said first dovetail slot such that no portion of said first one of dovetails directly contacts said lamination having said first dovetail slot formed therein.

11. The stator of claim 10 wherein said second one of dovetails projects into said second dovetail slot such that said second one of dovetails directly contacts a portion of said lamination having said second dovetail slot formed therein.

12. The stator of claim 8 wherein more of said stator core is formed by said pre-packaged stator core section than said manually stacked stator core section.

13. The stator of claim 8 wherein said pre-packaged stator core section is held to said stator frame by a force caused by core stacking pressure of said stator core.

14. A method of assembling a stator comprising:

providing a stator frame;

connecting a plurality of key bars to said stator frame, each of said key bars having a dovetail; and

forming a stator core including:

forming a pre-packaged stator core section including at least one first lamination having a first dovetail slot;

coupling said pre-packaged stator section to said stator frame by engaging a first one of said dovetails into said first dovetail slot;

forming at least one second lamination having a second dovetail slot; and

coupling said second lamination to said stator frame by manually stacking said second lamination such that a second one of said dovetails engages into said second dovetail slot to form a manually stacked stator core section.

15. The method of claim 14 wherein said first and second dovetail slots are formed such that a cross-sectional area of said first dovetail slot is larger than a cross-sectional area of said second dovetail slot.

16. The method of claim 15 wherein said pre-packaged stator core section is coupled to said stator frame such that no portion of said first one of dovetails directly contacts said lamination having said first dovetail slot formed therein.

17. The method of claim 16 wherein said manually stacked stator core section is coupled to said stator frame such that said second one of dovetails directly contacts a portion of said lamination having said second dovetail slot formed therein.

18. The method of claim 14 wherein more of said stator core is formed by said pre-packaged stator core section than said manually stacked stator core section.

19. The method of claim 14 wherein said pre-packaged stator core section is held to said stator frame by a force caused by core stacking pressure of said stator core.